

What Is Claimed Is:

1. A voice recognition device comprising:
 - a feature extraction device for receiving a plurality of input signals routed in parallel via a plurality of respective, separate channels, the feature extraction device including a plurality of feature extraction stages, each of the plurality of feature extraction stages being separately situated in a respective one of the plurality of separate channels and each having a respective output for providing a respective feature vector;
 - a shared transformation device coupled to the outputs of the feature extraction stages, the transformation device forming transformed feature vectors;
 - and
 - a classification unit for classifying the transformed feature vectors provided by the transformation device and providing at least one output signal corresponding to at least one determined class.
2. The voice recognition device according to claim 1, wherein the transformation device is a linear transformation device.
3. The voice recognition device according to claim 1, wherein the transformation device performs one of a linear discriminant analysis and a Karhunen-Loève transform.
4. The voice recognition device according to claim 1, wherein the transformation device depends upon sample data.
5. The voice recognition device according to claim 1, wherein the classification unit is trained under conditions corresponding to a designated application situation.
6. The voice recognition device according to claim 1, further comprising interference noise reduction stages allocated to each of the feature extraction stages, the interference noise reduction stages being connected in series.